PortCDM – International Harmonization

IALA VTS Committee

March 2017

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PortCDM Introduction Movie

The vision of e-Navigation

Ship

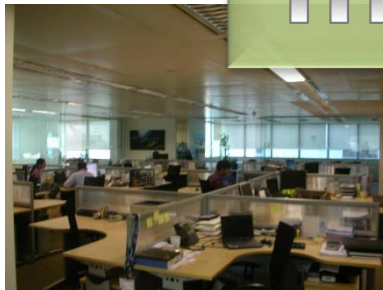Owner/Operator

PSC

Close collaboration to optimize maritime transport

VTS – Coastal State

HOs

Customs…

Ports

Concerns of Sea Traffic Management

The problem: The need to increase efficiency in operations within and between ports

Maximize the utilization of the facilities in ports

Minimize the use of energy to steam between two ports

constrained by safety considerations

STM is a concept for sharing secure, relevant and timely maritime information with authorized service providers by standards for information management and interoperable services

Scope of the STM Validation Project

Validating concepts at:
- 300 ships
- 13 ports
- 5 service centres
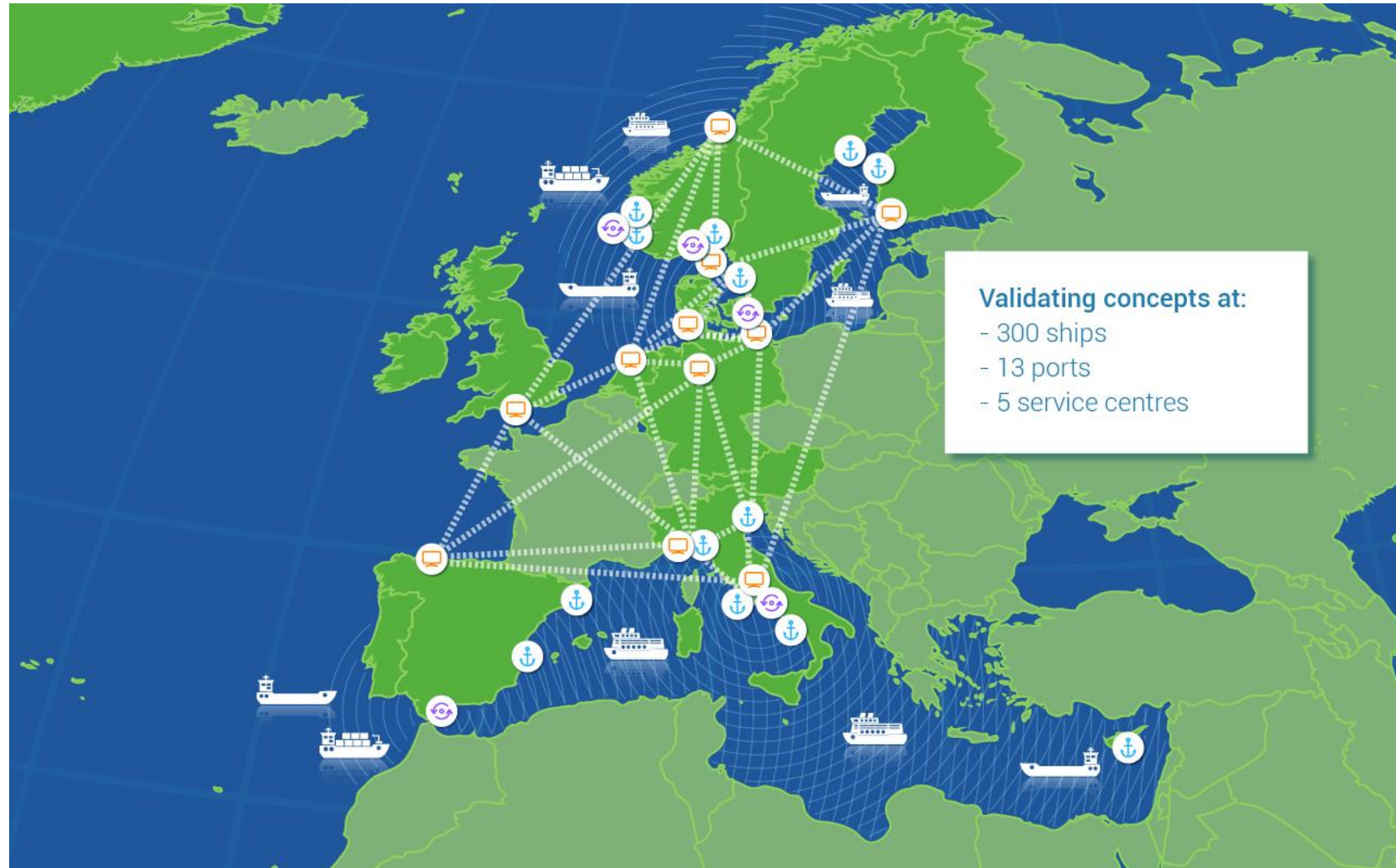
PortCDM:
Connection to MSP

1. **VTS Information Service**

2. **VTS Navigation Assistance Service**

3. **VTS Traffic Organization**

4. **Local Port Service**

5. Maritime Safety Information Service

6. **Pilotage Service**

7. **Tug Service**

8. **Vessel Shore reporting**

9. Telemedical Maritime Assistance Service

10. **Maritime Assistance Service**

11. Nautical Chart Service

12. Nautical Publication Service

13. Ice Navigation Service

14. Meteorological Information Service

15. Real-time hydrographic and environmental information Service

16. Search and Rescue Service

The Structure of the Port Call Process

States prior and during port calls

All ports work differently
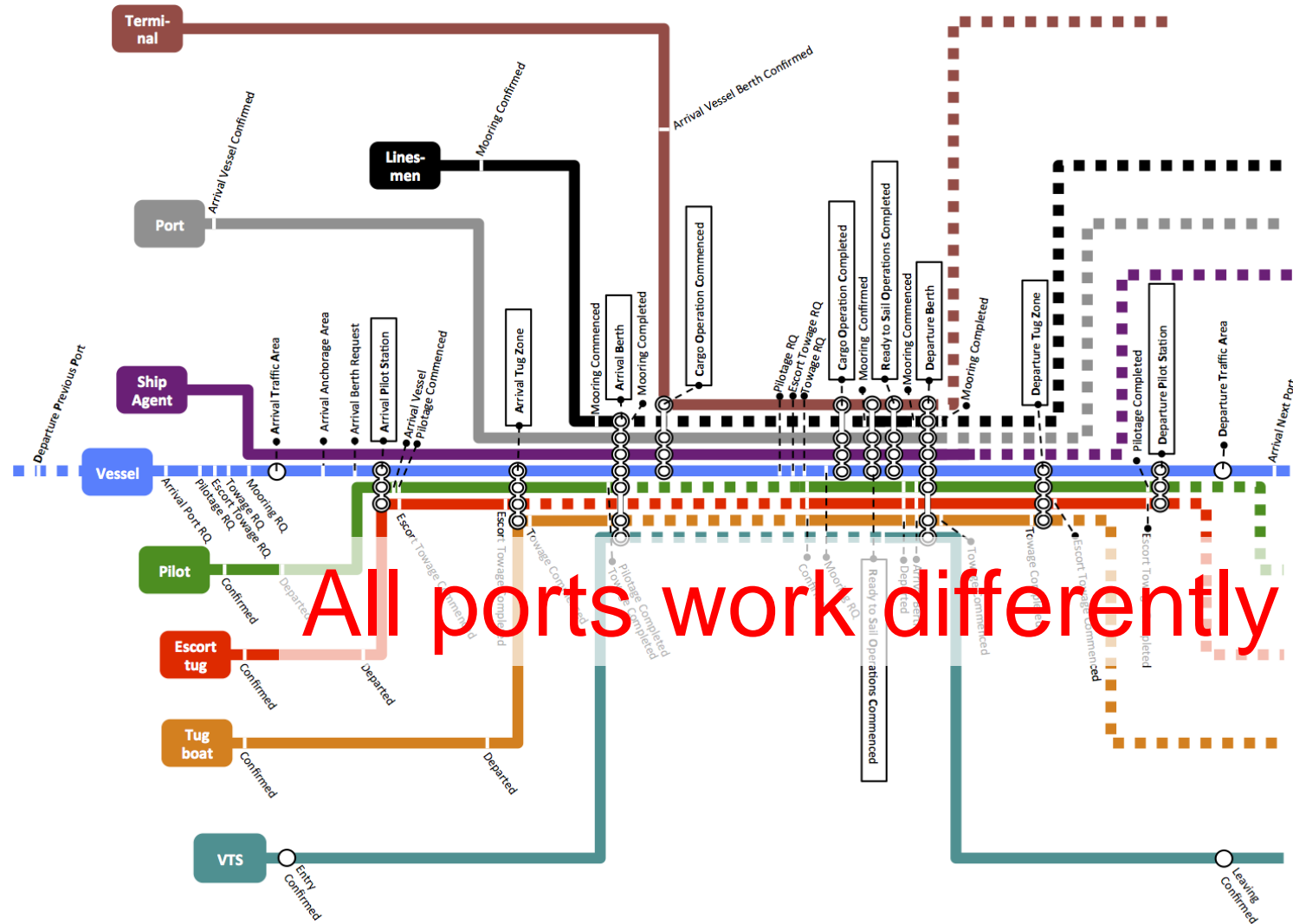
Lind M., Haraldson S., Karlsson M., Watson R.T. (2016) Overcoming the inability to predict - a PortCDM future, 10th IHMA Congress – Global Port & Marine Operations, 30th May – 2nd May 2016, Vancouver, Canada

Is built upon and
has been a source
for the development of

PORT CALL
MESSAGE STANDARD

Is applied in
approaches for

is of use for

PORT call
synchronization

PORT call
optimization

Maritime authorities, Port authorities, VTS and
other port actors, BIMCO,
Shipping companies, Service Providers,
(Bridge) Equipment suppliers,
Platform providers, Standardization
organizations (like GS1)

IMO INTERNATIONAL MARITIME ORGANIZATION

E

FACILITATION COMMITTEE
40th session
Agenda item 17

FAL 40/INF.X
30 December 2015
Original: ENGLISH

ANY OTHER BUSINESS

Information concerning the development of uniform definitions of ship port operations
in support of safe, efficient and sustainable transport logistics

Submitted by International Harbour Masters' Association, BIMCO, International
Association of Ports and Harbors, International Bulk Terminals Association, ICHCA
International Ltd., International Marine Contractors Association, InterManager,
International Port Community Systems Association, International Parcel Tankers
Association, International Transport Workers' Federation, World Nuclear Transport
Institute

|	SUMMARY
Executive summary:	Open electronic platforms and digital applications assisting ports and ship managers improve the efficiency of operations are under development but this development has been hampered by the absence of internationally agreed definitions of ship port operations. This paper provides information about industry discussions to develop agreed descriptors of events during a ship's arrival, stay and departure in port.
Strategic direction:	8
High-level action:	8.0.3
Planned output:	No related provisions
Action to be taken:	Paragraph 16
Related documents:	FAL Convention (2005 Amendments); FAL 38/5/2

Introduction

1   Shipping worldwide makes use of identical events in their log books, regardless of the type of ship. These events have never been defined, formalized or brought in line with the definitions of events that are used in ports. The intention is to harmonise understanding of events both onboard and onshore related to the arrival, stay and departure of the ship in port and in the port approach. Computer software and digital applications using uniform events will result in more streamlined processes between ship and port.

2   A common understanding of ship port operations will enable electronic message formats to be developed that will be understood by all parties.

RISE

BM

STM SEA TRAFFIC MANAGEMENT

The connected port – desired effects
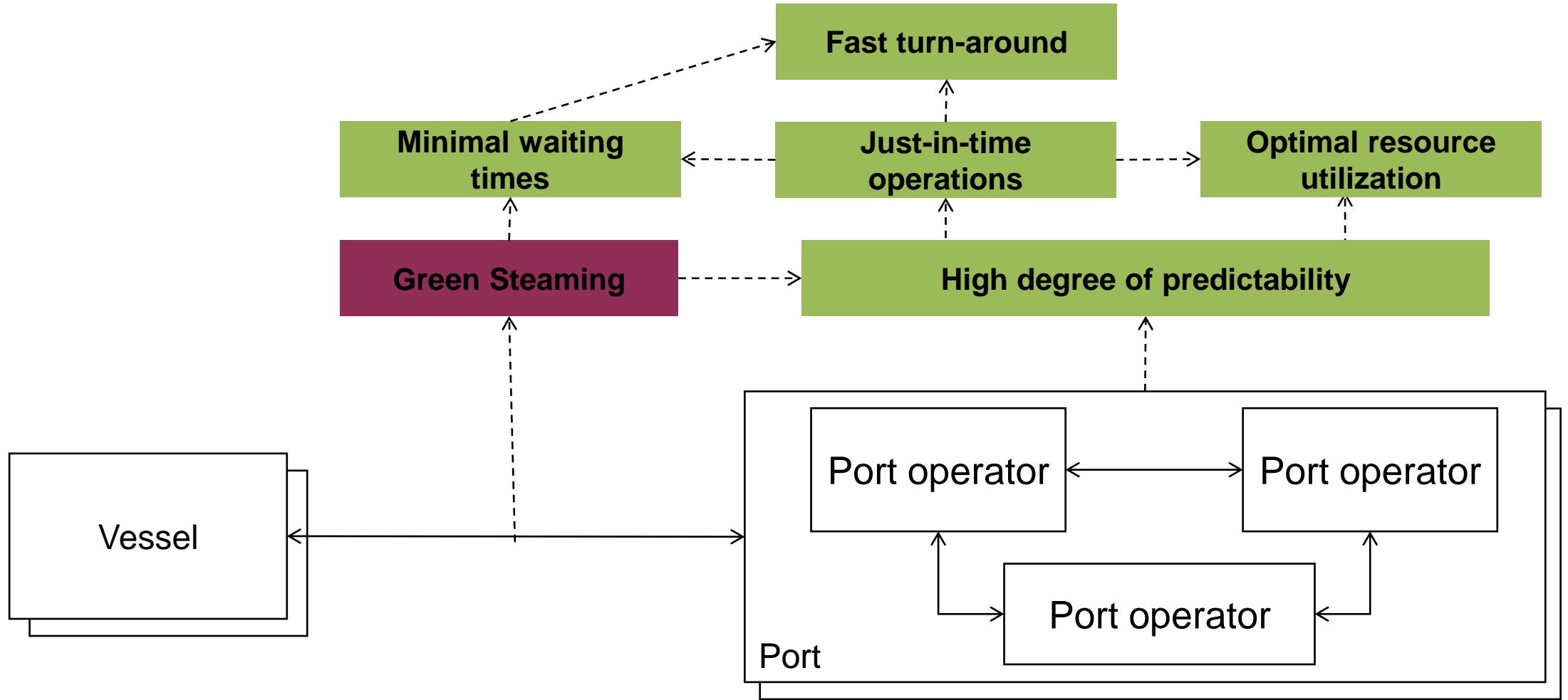
PortCDM testbeds - some characteristics

- **Each port focuses**

Within the port	Integration with voyage man.	Port-to-port collaboration	Port-to-hinterland collaboration

- **Operational services:**

Port call optimization	Port call synchronization	Port call monitoring	Port call improvement

- **KPI's**

Predictability	Duration time	Berth productivity
Puctuality	Waiting times	Capacity utilisation

PortCDM council: **Development to date**

- Definition of the role and routine of the council

- Initial Definition: PortCDM

- Engaging with key stakeholders

- Identifying PortCDM Council as necessary component

- Initial meeting gathering input with very good response

- Initial Definition of PortCDM

The PORTCDM Council assignment

- Establish a platform of standards and services to enhance the efficiency and effectiveness of collaborative port decision making related to improving port operations. These standards are:
  - Digital messages related to port call operations and coordination.
  - Informational processes related to port call operations and coordination.
  - Measurements of all port call operations efficiency.
  - Conception of the port call process.

- These services include
  - Define Certification of PortCDM compliant software
  - Development of forums
  - Roadmaps (including maturity level analysis of selected ports) indicating the planned direction of PortCDM
  - Consulting with involved stakeholders
  - Managing co-innovation risks, adoption risks, and execution risks

PortCDM council: **Next Steps**
Setting Sail

- Win key participants:
  - NGOs/IGOs (IHMA, BIMCO, IMPA, IALA, CIRM, InterTanko, CLIA…)
  - Launching Port Authorities and Maritime authorities
  - Dominating shipping companies
  - Some key stake holders in the international port community
  - Some IMO Member States

- Conduct an PortCDM Council inauguration meeting

- Refine and approve the charter for the PortCDM Council

- Define the meeting frequency

- **Welcome to join!!!!**

PortCDM Council: Inauguration Conference Call

29 March 2017
14:30 to 16:30 CET

Please join my meeting from your computer, tablet or smartphone.
https://global.gotomeeting.com/join/356182125

Access Code: 356-182-125

You can also dial in using your phone.
Sweden (Toll Free): 0 200 330 924 ; United States: +1 (224) 501-3318 ; Australia: +61 2 8355 1038 ;
Austria: +43 1 2530 22500 ; Belgium: +32 27 00 6375 ; Canada: +1 (647) 497-9373 ; Denmark: +45 32 72 03 69 ;
Finland: +358 972 52 2971 ; France: +33 157 329 481 ; Germany: +49 69 5880 7802 72 ; Ireland: +353 15 360 756 ;
Italy: +39 0 291 29 46 27 ; Netherlands: +31 707 709 520 ; New Zealand: +64 9 282 9510 ; Norway: +47 21 93 37 37 ;
Spain: +34 932 75 1230 ; Seden: +46 853 527 818 ; Switzerland: +41 445 1124 85 ; United Kingdom: +44 20 3713 5011

First GoToMeeting? Try a test session: http://help.citrix.com/getready

Conclusion

➢ The port call process is a complex sequence of activities

➢ The basic unit of analysis is the timestamp

➢ PortCall Message needs standardization (S-2XX Prod Spec)

➢ International Coordination through the PortCDM Council is needed

The Committee is invited to note the information and consider this input when discussing related topics

THINK DIFFERENT

MAKE THINGS HAPPEN

MAKE A DIFFERENCE

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